

Learning about sick schools

Dust and mold can impede students' performance

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[Kris Sherman](#); The News Tribune

Some days, fifth-grader Taylor Revelle spends as few as 15 minutes in Artondale Elementary School near Gig Harbor before she gets a rash. Or a headache. Or other signs of illness.

"She's been getting rashes on her arms, on her ankles, on her belly, places that aren't exposed to the air," mom Kim Snyder said. "She's been sent home sick 50 days so far (this school year)."

School and health department officials think the culprits are excessive dust, poor ventilation and mold.

Environmental problems are not unique to Artondale.

While Peninsula School District officials work to solve them at the 1960s-era school, their colleagues across the Puget Sound area and the nation are learning how to deal with - and pay for - "sick building syndrome."

There are no national standards or guidelines for such environmental problems in schools, says Claire Barnett, executive director of the Albany, N.Y.-based Healthy Schools Network. But the Environmental Protection Agency says air pollution leads to mental lapses and poor performance.

In recent years, environmental sleuths uncovered mold problems at Roy Elementary School, Decatur High School in Federal Way, Vashon Island High

School and an elementary school in the Highline School District, among others, said Tim Hardin, the state's indoor air-quality program manager for schools.

He's periodically called to evaluate Tacoma schools, too.

"The only one we've ever walked away from (or couldn't fix) was the elementary in the Highline School District," he added. "It's been a problem for 10 or 15 years. The multipurpose room, library and gym all had water intrusion and mold issues."

Statewide, health department specialists investigate suspected environmental problems such as mold and unhealthful air at dozens of schools each year, he said.

National studies also reveal the extent of sick school syndrome.

Consider:

- * A 1995 report released by the U.S. General Accounting Office concluded that more than half the nation's 115,000 schools suffer from indoor air-quality problems.

- * Fifty-five million Americans - about one in five - spend their days in elementary and secondary schools, according to the EPA. And children, the EPA says, "are especially susceptible to pollutants."

- * One-third of the nation's schools need major repairs or replacement, according to a 2000 study by the Washington, D.C.,-based National Education Association. Leaky roofs, mold, poor ventilation and filthy carpets are present in many of those buildings.

NEA analysts estimate fixing or rebuilding the nation's sick and crumbling schools, along with installing new technology, would cost about \$322 billion - money school districts just don't have, spokeswoman Kathleen Lyons said.

* Officials in 12 states are scratching their heads over the cause of unexplained rashes that developed among thousands of students in several schools over the past two weeks. Researchers at the Centers for Disease Control and Prevention in Atlanta are studying the cases.

The 470-student Artondale school closed to students Feb. 12 so work crews could tackle its dust, mold and ventilation problems.

Before the closure, students and staff members complained for months about unexplained rashes, headaches, itchy eyes, sinus troubles, difficulty breathing and other problems. None of the illnesses was believed life-threatening, but paramedics recently came to school twice and gave oxygen to stricken adults.

Now Artondale students are learning in makeshift classrooms spread across four other schools and the school district offices until the all-clear is given to move back.

No one knows yet when that might be or what the cleanup will cost. District deputy superintendent Marcia Harris ventured a "ballpark estimate" of \$50,000 two weeks ago, but as more problems are found and fixed, the cost could rise dramatically.

The recent mold cleanup at Federal Way's Decatur High cost \$147,200.

Artondale's problems, which date back several years, developed slowly.

The school district ordered extensive tests and maintenance to solve indoor air-quality problems after complaints of unexplained illnesses at Artondale in 1997. More testing occurred over the past two years, but the source of the problems remained a mystery, Harris said.

"Believe me, if we had known what the problem was early on, we would have fixed it," Superintendent Jim Coolican told parents during a recent meeting. "I'm

embarrassed. I'm mortified that in this day and age we don't know how to build (and safely maintain) a school."

A huge percentage of levy funds go toward school maintenance and repairs, Harris said, and Peninsula officials are asking voters to approve a three-year, \$38 million maintenance and operations levy March 12.

Healthy Schools director Barnett calls "this sick schools thing a national phenomenon."

"It takes an enormous amount of pain and suffering to get through these events," she said.

Healthy Schools Network is a nonprofit advocacy group dedicated to helping parents, staff and community members get action on their environmental concerns, Barnett said. She is also the chairwoman of an Environmental Protection Agency work group on school environment.

"Your school district (Peninsula) certainly ought to be commended for closing the school down and getting the students into other schools," Barnett said. "That doesn't happen very often."

Despite the fact that EPA and CDC investigators often study such problems, Barnett is livid that there's no federal law protecting schoolchildren from sick buildings.

"Indoor air quality is an orphan issue. No one has responsibility for it at the federal level in terms of setting guidelines or anything enforceable."

Even if you don't feel sick, your work performance can suffer from breathing dirty or contaminated air, Barnett added.

The EPA agrees.

Poor indoor air quality can cause health symptoms that lower performance, including mental tasks that take concentration, calculation or memory, according to information the agency provides on the Internet.

Hardin, the state's indoor air-quality program manager, says mold, dust and other problems can occur in any building, whether it's 5 or 50 years old. He blames excessive amounts of paper, materials stored in cardboard boxes, carpets, a dirty playground, general clutter and personal dust for much of the problem.

Paper itself is a huge problem because minute dust particles fly into the air from every piece you have, he explained. And it's not one kind of dust but many because papers made of different materials put out different particles.

And then there's the "Pig Pen" issue.

"We're all like little 'Pig Pens' (a character from the Peanuts cartoon strip), carrying our own personal clouds of dust around with us," Hardin said.

That dust includes skin flakes, dandruff, clothes fibers, dirt, pollen and other items from places you've been - even cat dander and dog fur if you have a pet.

The problems are compounded when you have 25 or more students, all breathing, all rustling, all expelling dust, in a classroom, Hardin said.

Whatever the cause, signs now posted at Artondale leave no doubt that the remedy will be neither easy nor cheap.

"DANGER. Microbial remediation," reads a sign on one door leading to classrooms tented in plastic. "Respiratory health hazard. Authorized personnel only. Respirators and protective clothing required in this area."

The repairs probably will blow a hole in the district's maintenance budget. But Harris says that doesn't matter.

"Health and safety is our number-one priority," she said. "If students don't feel safe in an environment, then they're not going to learn."

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SIDEBAR: Tips for parents:

* If you think a school building is making your child sick, keep a calendar of all the days he or she is sent home from school or stays home with the same kinds of symptoms.

* Take your child to a physician and document the visit so you have a record for future reference.

* If you think there's a link between your child's illnesses and the school, go to the school and walk around it to see if you experience any of the symptoms.

* Talk to the head custodian about problems he or she has encountered in the school. Are work crews given enough time to clean the building well?

* Notify school, local and state health department officials as soon as you suspect there's a problem.

Source: Claire Barnett, executive director of Healthy Schools Network, Albany, N.Y.

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SIDEBAR: On the Internet

Here are some Internet sources for information about indoor air quality and other "sick building syndrome" problems in schools.

* www.nea.org/esp/resource/iaq.htm.

* www.education-world.com/a_issues/issues174.shtml.

* www.epa.gov/iaq/schools/index.html.

* www.healthyschools.org.

* www.doh.wa.gov/ehp/ts/IAQ.HTM.

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